

Module II

Ways of Investing in Your Future

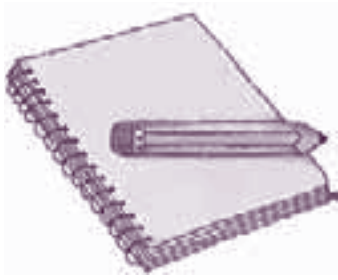


Investing is a way of potentially growing your savings by selecting assets from which you hope to profit, or the act of using money to make more money.

Prerequisite Skills

To work through this unit, students will need to:

- understand the basic financial terms discussed in Module I
- collect and process information to write a report
- work with large numbers and be able to express scientific notation
- understand simple mathematical formulas
- read and create simple spreadsheets
- understand how to access a Web site given its URL



Teacher Notes

Students will explore investing and the impact of compound interest.

Making Connections

How do you choose a bank and open a savings account?

Where would you go, or with whom would you speak, to buy GICs, T-Bills, or Canada Savings Bonds?

Activity 7 – Growing Your Savings

Expectations

Students will:

- explore savings accounts, GICs and Canada Savings Bonds,
- learn to calculate interest and growth rate,
- be introduced to the concept of compound growth and its impact on investments over time, and
- be introduced to new terms related to money management.

Assessment Tools

Suggested for use with this activity:

- Performance Task
- Observation
- Interview

Co-operative Group Strategies

- Brainstorm
- Pairs Explore
- Class Share
- Think-Pair-Share

Instructional Steps

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|----------|---|
| 1 | <p>Introductory Activity: As a class, <i>brainstorm</i> the various ways in which students save money, then <i>brainstorm</i> how they could invest the money they save.</p> <ul style="list-style-type: none"> • List any terms they may mention such as stocks, bonds, GICs, etc. Briefly define these for students using the glossary at the back of the book, and let them know that they will learn more about these terms during the activity. |
| 2 | <p>Authentic Activity: Have students use <i>pairs explore</i> to read “Growing Your Savings,” page 104. Pairs research on the Internet and in the library to complete “Investment Terms.”</p> <ul style="list-style-type: none"> • <i>Class share</i> any difficulties. • Ask students to complete the exercises on page 105 using <i>pairs explore</i>. |

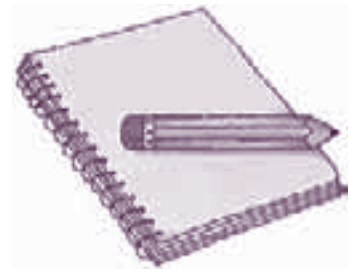
	<ul style="list-style-type: none"> • Read “The Value of Interest” on page 106 and discuss simple and compound interest as a class. • Using <i>think-pair-share</i>, ask students to discuss what “rate of growth” means. In pairs, have students complete exercises 1 to 3 on page 106. • Share students’ answers with the whole class and <i>class share</i> any queries.
3	Internet Investigation: Complete the Internet Investigation “Comparing Savings, GICs, and T-bills” exercises 1 to 3, on page 106, using <i>pairs explore</i> .
4	Closure: Using <i>class share</i> , create a summary note on all the terms, including compound growth, associated with investing.
5	Extension: In groups of three, gather samples of investment papers, for example, GICs, treasury bills, Canada Savings Bonds, and certain stocks using the Internet and by visiting local banks.

Assessment

- 1 Students add their definitions from “Investment Terms” on page 104 to their *portfolios*.
- 2 Collect answers to questions 1 through 5 on page 105 as a *performance task*.
- 3 Students complete a *journal* explaining why the amount invested with compound interest is larger (“The Value of Interest,” page 106).
- 4 Use *observation* to assess students’ skill of “listening to others.”
- 5 While students are completing the Internet Investigation, *interview* students to determine their understanding of the key terms discussed in the investigation.

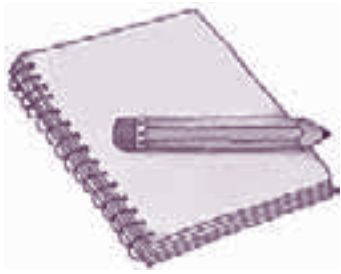
Terms

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|-----------------------|-------------------------------------|-------------------|
| • Accumulated value | • Growth rate | • Savings account |
| • Canada Savings Bond | • Guaranteed Investment Certificate | • Stock |
| • Capital gain | | • Treasury Bill |
| • Compound interest | • Interest | |
| • Dividend | • Investment | |



Teacher Notes

Providing feedback on the performance task is another strategy for helping students set goals for improvement and for recognizing achievement.



Teacher Notes

Students will understand how entrepreneurs can build wealth.

Activity 8 – Canadian Entrepreneurs

Expectations

Students will:

- reinforce their understanding of scientific notation,
- practise ordering large numbers,
- review using timelines and patterning,
- understand the concept of entrepreneurs,
- practise measurement skills, and
- be introduced to new terms related to money management.

Assessment Tools

Suggested for use with this activity:

- Portfolio
- Performance Task

Co-operative Group Strategies

- Pairs Explore
- Think-Pair-Share
- Class Share
- Numbered Heads
- Co-op Co-op
- Brainstorm

Instructional Steps

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| 1 | <p>Introductory Activity: Use <i>pairs explore</i> to read “Canadian Entrepreneurs” and then <i>think-pair-share</i> to answer exercises 1 to 4 on pages 112 and 113.</p> <ul style="list-style-type: none"> • Use <i>class share</i> to discuss the exercises. |
| 2 | <p>Investigation: Ask students to work in groups of four to read “Working With a Million” (pages 114 and 115), and complete exercises 1 to 5.</p> <ul style="list-style-type: none"> • Use <i>numbered heads</i> to present all 5 exercises. |

3	Closure: Create, as a class, a summary note on large numbers, and then create and answer problems involving large numbers.
4	Internet Investigation: Form small groups and use <i>co-op co-op</i> to complete and present the Internet Investigation on page 115.
5	Extension: Have students calculate how long it would take to give away \$1 500 if they gave out \$100 first, and then doubled the amount every day thereafter. Try \$6 300? \$25 500? <i>Brainstorm</i> ways in which this problem could be efficiently answered for very large amounts of money.

Assessment

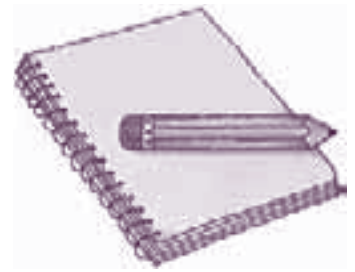
- 1 Have students add the Internet Investigation to their *portfolios*.
- 2 Have students complete the following *performance task*.

The table below shows how much the Chan family spends on leisure each week for three weeks. Estimate how much the Chans would spend on leisure in a year. Show your work.

	Amount
Week 1	\$49.57
Week 2	\$36.71
Week 3	\$58.04

Terms

- Billion
- Consumer
- Entrepreneur



Teacher Notes

When forming groups, be sure to vary members but attempt to form heterogeneous groupings whenever using co-operative group learning strategies.

Making Connections

What kind of business would you start and why?

How have opportunities for women entrepreneurs changed over time?



Teacher Notes

Understanding that some collectibles increase in value over time will help students understand that assets, including stocks, can increase in value.

Activity 9 – Investing: Mickey Mantle To Picasso

Expectations

Students will:

- review and practise percent growth calculation,
- explore rate of growth,
- understand collectibles as investments, and
- be introduced to new terms related to money management.

Assessment Tools

Suggested for use with this activity:

- Interview

Co-operative Group Strategies

- Brainstorm
- Class Share
- Pairs Coach
- Pairs Explore
- Carousel Share

Instructional Steps

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|----------|--|
| 1 | <p>Introductory Activity: Ask students if they have ever had experience with an item that has appreciated in value over the years.</p> <ul style="list-style-type: none"> • As a class, <i>brainstorm</i> possible items that increase in value, e.g. antiques, art, real estate, sports cards, and others that tend to depreciate, e.g. computers and technology. • Ask students to read “Investing: Sports Cards” (page 128) then <i>class share</i> the “discuss” questions. • Use <i>pairs coach</i> to answer exercises 1 to 3 and <i>class share</i> any challenges. • Use <i>pairs coach</i> to complete exercises 1 to 3 on page 129, “Percent Growth.” <i>Class share</i> any challenges. |
| 2 | <p>Authentic Activity: As a class, read “Investing in Art” on page 130, then <i>class share</i> the “discuss” questions.</p> <ul style="list-style-type: none"> • Use <i>pairs coach</i> to answer exercises 4 to 6. |

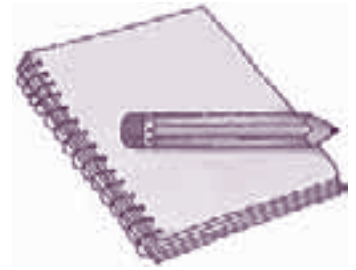
3	<p>Investigation: Have students read the first half of “How Do You Calculate Growth Rate,” page 131.</p> <ul style="list-style-type: none"> • Students <i>brainstorm</i> in groups how they might answer the “discuss” questions following the comic. • <i>Class share</i> group ideas. • Form pairs to read about the spreadsheet on the second half of the page, then complete Investigation exercises 1 to 3 on page 132 using the computer. <i>Class share</i> any queries.
4	<p>Internet Investigation: Using <i>pairs explore</i> research and write the report as directed on page 132.</p> <ul style="list-style-type: none"> • Use <i>carousel share</i> to compare the reports of the pairs.
5	<p>Closure: Together, create a summary note on calculating percent growth and growth rate.</p>
6	<p>Extension: Have a class discussion on the various types of interest rates that banks offer – annual, semi-annual, quarterly, etc. <i>Brainstorm</i> how these would be calculated using the formula. Have the students create examples with various types of interest rates.</p>

Assessment

- 1 *Interview* students as they *pairs explore* Investigation exercises 1 to 3. Ask questions that probe their level of understanding.

Terms

- Growth Rate
- Percent Growth



Teacher Notes

It is essential for students to understand the formula for percent growth.

Students may need to be reminded about the importance of compounding.

Making Connections

Using words, diagrams, and/or equations, explain how the three calculations for growth (page 129) are related.

Activity 10 – Investing In Companies

Expectations

Students will:

- learn to read stock market symbols,
- understand high, low and closing prices,
- calculate gains, losses and commissions, and
- be introduced to new terms related to money management.

Assessment Tools

Suggested for use with this activity:

- Portfolio
- Interview
- Journal
- Observation
- Performance Problem

Co-operative Group Strategies

- Brainstorm
- Class Share
- Numbered Heads
- Gallery Tour
- Pairs Coach
- Co-operative Review
- Pairs Explore
- Pairs Share
- Send a Problem

Instructional Steps

- 1 **Introductory Activity:** Ask students to read the top half of page 138 and *brainstorm* with the class on how to raise money to build a virtual reality ride. Here are some ways that may be mentioned:
 - 1 Let investors ride for free. This is risky for the investor: if the ride is built badly, is far away, or the investor does not like the ride, then the investor wouldn't benefit.
 - 2 Give investors a share of the profits. Investors are promised a set amount of money, e.g. \$3 000 in a year's time. This is risky for the group: if profits turned out to be less than anticipated, they would still have to pay out the money promised.
 - 3 Give investors a share of the profits. Investors are promised a percent of the profit earned in a year's time. This is the best option for both the investors and the group. Review with students what a share is.



Teacher Notes

Students will gain an understanding of a stock exchange as a marketplace. They will also come to understand the concepts of buyers and sellers, bid and ask, and supply and demand.

Making Connections

What does a stockbroker do? How do you choose a stockbroker?

	<ul style="list-style-type: none"> Students work in groups to decide how many shares they would sell, and what value each share needs to have, e.g. 100 shares would have to each be sold for \$6 000 to raise the money needed. Students name their ride and create a stock certificate for investors using the template provided on page 138. Ask students to perform a <i>gallery tour</i> of the stock certificates.
2	<p>Authentic Activity: Using <i>pairs explore</i>, students read “Investing in Companies,” page 139, and complete exercise 1.</p> <ul style="list-style-type: none"> Pairs <i>brainstorm</i> ways of exchanging shares. Students may identify selling, trading, inheritance, and giving them away. Ask pairs to read “How Do Stock Markets Work?,” page 140, and answer the “discuss” questions. Describe the process of trading stocks. You may use “How Do Stock Markets Work – The Process” on page 141.
3	<p>Closure: Have students use exercises 1 and 2 on page 141 to create a summary note. <i>Class share</i> their definitions for each term, and their solution to exercise 3.</p>
4	<p>Investigation: Have students work as <i>pairs explore</i> to read “How Do You Read a Stock Page?” on page 142, then use <i>pairs coach</i> to answer exercise 1. Note that “Vol 00” refers to number of board lots, or 100-share chunks.</p> <ul style="list-style-type: none"> Students work on their own to complete exercise 2 on page 143.
5	<p>Newspaper Investigation: Students complete the Investigation (exercise 3) individually on page 143. Use <i>pairs share</i> to reinforce understanding of the stock exchange information.</p>
6	<p>Extension: To reinforce understanding of financial terms, provide students with the financial section of the newspaper. Using <i>co-operative review</i> have students make up questions to review how to read a stock page.</p> <ul style="list-style-type: none"> Use <i>send a problem</i> to have pairs practise questions from their peers based on the stock page. <i>Class share</i> one or two exceptionally well done questions and solutions.

Assessment

- 1 Ask students to submit the Newspaper Investigation on page 143 for their *portfolios*.
- 2 *Interview* the students, as they are completing Investigation exercises 1 and 2, to determine students' understandings of the main concepts / definitions learned.
- 3 Use a *journal* to explain a good investment in the stock market pages of the newspaper.
- 4 Use *observation* to note to what degree students are teaching each other.
- 5 Ask students to submit exercises 2 and 3 on page 143 as a performance problem.

Terms

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|----------------|----------------------|------------------|-----------------|
| • Board Lot | • Dividend | • Profit | • Trade |
| • Broker | • Earnings per share | • Share | • Trader |
| • Capital Gain | • Market close | • Share price | • Trading floor |
| • Capital Loss | • Marketplace | • Shareholder | • Yield |
| • Collectible | • <i>P/E</i> ratio | • Stock | |
| • Commission | | • Stock exchange | |

Materials

- Calculator
- Newspaper with current Toronto Stock Exchange information